TYING LOOSE ENDS IN KAWAIISU PHONOLOGY: SOME COMMENTS ON ZIGMOND, BOOTH & MUNRO (1990)

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1. My initial fieldwork with Kawaiisu took place during the Summer of 1958, in Kelso Canyon and Kelso Valley, California, sponsored by the Survey of California Indian Languages, Department of Linguistics, University of California, Berkeley. My comparative analysis of the hypothetical Proto-Mono-Kawaiisu took place in 1959 during the Spring term, at the specific request of Mary Haas. After correcting my first version, she told me to make the changes, review it with Sydney Lamb, and submit it for publication to IJAL (Klein 1959).[1]

On the next several pages, I include an exact reproduction of an intermediate draft of my phonemic description of Kawaiisu. An earlier version made use of a more formal notation, listed the phonetic form as well as the phonemic for each example, and reflected a considerable difference in descriptive writing style. The following includes the penciled comments and corrections, primarily by Mary Haas and, to a lesser extent, by Sydney Lamb. To understand the context of Haas' rewriting of my descriptive statements, one might read Charles Hockett's *Two Grammatical Models of Description* (1954).

2. DEPARTURE. Toward the end of the 1959 Spring term I attempted a partial description of Kawaiisu morphology and syntax derived from Zellig Harris' phrase structure model, formulated in a categorial grammar notation (Harris 1946, 1951). I sent Harris a copy. At the end of the 1959 Spring term I departed for the University of Pennsylvania, where I accepted a job as a Research Investigator on Harris' Transformations and Discourse Analysis Project, one of the earliest computational linguistic projects funded by the National Science Foundation (it might have been the first). I would not defend the Kawaiisu categorial grammar I produced then, but it is available for downloading in *pdf* and *zip* Word formats, at

http://www.cs.wisc.edu/~sklein

Part of what I did after, and before can be found there on page 1 of my Vita (Vita-page-1.zip), and, in part, on my web page at

http://www.cs.wisc.edu/~sklein/sklein.html

[1] The analysis in the IJAL paper served as the basis for a problem in a textbook, *Workbook in Comparative Reconstruction*, by William Cowan, published by Holt, Rinehart and Winston, Inc. in 1971.

Preliminary Phonemicization of Kawaiisu

100. Introduction

This analysis is subject to revision upon further investigation in the field.

200. The Phonemes

210.

	bi-labial	al-veolar	al-veolar affricate	velar	labio-velar	glottal
Stop						
vcl.	p	t	c	k	kw	?
vcd.	b	d	dz	g	gw	
Grooved-spirant						
vcl.		s				h
vcd.		z				
Nasal	m	n				
Lateral		l				
Semi-vowel		j			w	

	Front	mid	back
high	i	ɨ	u
low	e	a	o

Junctures: # , .

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220. Junctures /#/ /,/ /./

221. The juncture phonemes are marked by the following phonetic phenomena: In an utterance between junctures every even numbered mora unit preceding the final juncture receives stress. Penultimate mora units receive primary stress and high pitch. The first stressed mora unit after an initial juncture receives a medium high pitch. A vowel cluster counts as two mora units.

222. This description must be modified for utterances of the form /CVCVCVVCV/ in which case the stress pattern is (CVCVCVVCV)

223. The /,/ and/./ junctures are also marked by as yet univestigated macrosegmental intonation phenomena.

230. Canonical Form

A syllable is defined as CV, -CCV, CVV and -CCVV. A phonemic word is any sequence without intervening juncture.

240. The voiceless stops, except for /ʔ/ are generally fortis and long. They have their greatest length in final syllables when not preceded by a vowel cluster. They may be weakly aspirated in unstressed syllables and before junctures. /p,t,c,k/ are weakly glottalized before an unstressed/a/ or /u/ followed by a velar stop. Voiced stops are lenis and usually shorter than their voiceless counterparts.

/p/ : /puʔibi/ 'eye,' /kukwopi/ 'wood.'

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vowel clusters. They may be weakly aspirated in unstressed syllables and before all junctures except /+/. /p,t,c/ are weakly glottalized in the environment /_vVelar Stop/ when the pertinent vowel is unstressed. Voiced stops are lenis and usually shorter than their voiceless counterparts.

/p/ has no other marked variants: /pu'ibi/ 'eye,' /kukwobi/ 'wood.'

/b/ is a bilabial spirant in initial position, and a bilabial stop when geminate or after /m/. In other environments the stop and the spirant vary freely. /busedvu/ 'calf,' /kysybi/ 'Bullethawk,' /haanubby/ 'trap,' /'egumbi/ 'tongue.'

/t/ has no other marked variants: /tabi/ 'sun,day,' /hy'yty/ 'good,' /'atakazi/ 'crow.'

/d/ is a voiced flap or stop except in initial position where it is semivocalic: /niododу/ 'copulate,' /dozi/ 'Rozie.'

/c/ and /dz/ , while patterning as stops, are phonetically voiceless and voiced affricates consisting of an alveolar stop with a grooved spirantal release [ts,dz]. These are both retroflexed after /i/ and in word-initial position before /i/. /dz/ in the aforementioned /i/ environments is often alternately articulated as a retroflexed voiced grooved spirant. /kucapa/ 'ashes,' /'eepici/'variety of lizzard,' /'eepidzi/ 'boy' In the dialect of Fred Collins /dz/ usually occurs only adjacent to /i/. Where this phoneme occurs in other environments of his wife's dialect, his cognate usually contains /d/; orig. Rose Collins: /modzonidy/ 'make round,' Fred Collins: /modonidy/.

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The velars /k,kw,g,gw/ are all backed before and after back vowels; the environment /a_a/ yields the most backed variants. The voiced velars are progressively lenis in articulation in proportion to the backing, and the more backed variants are spirantal in medial positions. /pʔohipika/ 'woodchip' /sanakaa/ 'ditch,' /pageʔkweedy/ 'get off,' /gajetaa/ 'crackers,' /pakanigwee/ 'to go(starting out).'

/ʔ/ : /ʔohoʔady 'be strong.'

2.3 Spirants

There is a voiced and a voiceless apical groved spirant /s,z/. /s/ is retroflexed under the same conditions as the affricates, and occasionally in initial position before /u/: /synaʔabi/ 'coyote,' /tanimuzi/ 'man,' /ʔanisi/ 'pack basket.'

/h/ is usually voiceless initially and voiced elsewhere: /hoa/ 'gun shell,' /wihici/ ~~'knife.'~~

2.4 Nasals

There are two voiced nasals /m,n/. Geminate nasals have a devoiced release. /tumadʸ/ 'to roast,' /tummada/ 'wild spinach,' /tanadʸ/ 'kick,' /cunnaci/ 'pipe.'

2.5. Semivowels

There are two semivowels /j,w/. /j/ is semivocalic [i̯] after /y/. /janduci/ 'kind of basket,' /wacuju/ 'four,' /tuwada/ 'lays (egg).'

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2.6 Vowels*

/i/ is articulated as a high-mid front vowel in unstressed syllables; a little lower before /#/,/,/ and /./. Elsewhere it is a high front vowel. /wihici/ 'knife.'

/e/ is a mid front vowel when a member of a geminate cluster; a lower mid front vowel elsewhere. /pagekweedy/ 'get off.'

/y/ ranges in articulation from a mid central vowel to a high central vowel to an unrounded high back vowel. The higher variants occur in stressed syllables; the highest occuring in syllables receiving primary stress. The relative fronting and backing of the vowel is influenced by the articulation of an immediately preceding vowel. /nykapy/ 'dance,' /syvby/ 'willow.'

/a/ is a low central vowel when a member of a geminate cluster or when another /a/ is in an adjacent syllable. Elsewhere it is a little higher in articulation, approaching a mid vowel in syllables receiving primary stress. /ka'ady/ 'eat.'

/u/ is a high back vowel before semivowels, or when a member of a geminate cluster. Elsewhere it ranges from a lower high vowel to an upper mid vowel. /puguzi/ 'dog.'

/o/ ranges in articulation from a mid to lower mid back vowel. The higher variants occur in unstressed syllables and in geminate clusters. /'ohooba/ 'bone,' /togowa/ 'rattlesnake.'

* For complete exemplification see the examples illustrating the consonants.

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3. RETURN. In 1980-81, Kenneth Hale, who was aware of my Kawaiisu material, urged me to return to the field, and to contact Maurice Zigmond, who had worked with the Kawaiisu in the 1930's, and again in the 1970's. I did as he urged, and after obtaining funding, initially from the UW Graduate School and later from the Wenner-Gren Foundation, I returned to the field a number of times during the period 1981-84. Maurice Zigmond had been extremely helpful in giving me details about remaining speakers, and my 1958 photographs and recordings provided credentials. I contacted, and collected texts and vocabulary from a total of six informants living in Bakersfield, Tehatchape and Kelso Valley. In 1958, being the newest fieldworker, I had been given only Mary Haas' old Webcor tape recorder to use rather than a Wollensak. This time I arrived with a portable Marantz cassette recorder and a portable Tandberg reel-to-reel recorder; I always recorded on both simultaneously, in different formats. I now have about 50 hours of recorded new material, including recordings, from several informants of the vocabulary data I had collected in 1958, as well as myth texts, ethnographic texts, and several hours of conversation entirely in Kawaiisu, and provided by three related female speakers who were sitting around a kitchen table. (I had used my living expense money to bring distantly located relatives together for several days, paying food expenses, on condition that they only speak Kawaiisu.) Carmen Peebles, then head of the Bakersfield area Tribal Council (representing about 50 tribes), provided spoken interlinear translations for all my recorded texts from 1958 as well as 1981 +. I recorded the translations on a hand held cassette recorder while playing back the texts, a phrase at a time, on the Marantz. (I'd transferred my 1958 recordings to reels in 1981, reviving them with facilities in the UW Linguistics Department sound lab.) The resultant translation tapes contain the translated phrases interleaved with the Kawaiisu segments.

4. COMMENTS.

4.1. KAWAIISU FILES THAT CAN BE DOWNLOADED. In the hard sciences, results must be reproducible by others if they are to be accepted. For that reason, I believe it is incumbent upon all who publish the results of their linguistic fieldwork to make available close phonetic transcriptions and, where possible, tape recordings of all source language data. If primary data sufficient to reproduce the analysis are not made available, claim to scientific validity is vitiated. Wave file recordings of Fred Collins and Rosie Collins are available for downloading at http://www.cs.wisc.edu/~sklein. These include vocabulary files pronounced by Fred Collins, and ordered by canonical form (with frequent repetitions and local re-orderings): Trk3a-1-FC.zip, Trk3a-2-FC.zip, Trk3b-FC.zip, Trk3c-FC.zip Trk3d-FC.zip, Trk3e-FC.zip, and a file of comparative pronunciations of words by Fred Collins and Rose Collins demonstrating /-mb-/ and /-bb-/ contrasts: mb-bb-FC-RC.zip. I have also included a text of Lida Girado that I transcribed by hand from a tape recording, in close phonetic notation, and which I executed with an italic pen. Included is an interlinear translation by Carmen Peebles: Lida-Kawaiisu Book of the Horse.zip (and in .pdf).

5. In 1974, Pamela Munro and Curtis Booth began work with Kawaiisu, and in 1990, Zigmond, Booth and Munro published a Kawaiisu grammar with dictionary and texts (Zigmond Booth and Munro, 1990).

5.1. DIFFERENCES. Pamela Munro and Maurice Zigmond challenge my analysis of Kawaiisu phonology as described in Klein (1959 & 1988), and question the accuracy of my transcriptions. I will acknowledge one error, an accidental omission of items in my introductory listing of Kawaiisu phonemes on the first page of Klein (1959). Those items are, in fact, rather obviously indicated in the presentation of my comparative analysis of Mono-Kawaiisu, and there is an inserted comment in Zigmond et al. to the effect that the omissions may have been due to a typographical error.[2]

5.2. WHOSE CONCEPT OF THE PHONEME? The concept of the phoneme used in Zigmond et al. was *not* mine. In 1959 the concept of an autonomous phonemic level still prevailed, and the theoretical debates concerned *item and arrangement* vs *item and process* and the somewhat older *God's Truth* vs *hocus pocus* types of rules. What Munro calls a *phoneme* I would have called a *morphophoneme*. Success of the Chomskian revolution was remote, and Bloomfield ruled. My theoretical influences were early Sydney Lamb, Charles Hockett, Bloomfield, and Zellig Harris. Sapir I valued for the Sapir-Whorf hypothesis, and his concept of *genetic drift*. By the mid 1970s the now powerful transformationalists terminated the concept of an autonomous phonemic level, altering the specification of its criteria in introductory Linguistics textbooks in ways that made it appear logically inconsistent. For students entering the field in later years, the term 'phoneme' was applied to what I had learned to call 'morphophoneme,' and transformationalists had initially called 'systemic phoneme'.

Zigmond et al. acknowledge surface contrasts between voiced and voiceless velars: k/g, and kw/gw but treats g and gw as fricatives rather than stops. In terms of my synthesis of the methodology of the era, their phonological arguments support an analysis of /g/ and /gw/ as velar stops: *Synchronic* description was to be independent of *diachronic* criteria. The contemporary structure of a language was to dictate its analysis. Knowledge of prior states of a language was not to affect synchronic descriptive choices. Borrowed forms were not to be excluded from an analysis if any innovations they implied were detectable elsewhere in the structure. The distributional patterning of phonemes was to be a primary criterion in determining descriptive status. I found speakers with word initial voiced velar spirants in word initial position in loan words from Spanish. I also found an intervocalic /-b-/ that varied freely between allophones [b] and [β]. I also found geminate intervocalic /-bb-/ with no phonetic variation other than cluster length. At one point in 1958-59, I considered listing the alveolar affricates as voiced and voiceless stops on the grounds that their distributional patterning was that of the stops. My synthesis of the era's methodology would have given that choice plausiblity.

5.3 ARCHAIC FORMS OR DIFFERENT DIALECTS? Zigmond et al. indicate that -mb- pronunciations are archaic (or spoken only by earlier generations). However, the wave files in mb-bb-FC-RC.zip attest a set of words that Fred Collins pronounces with /-mb-/ and Rose Collins pronounces with /-bb-/. But Rose Collins was seven or eight years older than Fred Collins, and Rose Collins was older than Lida Gerado. This seems to imply that Zigmond's observation about the absence of /-mb-/ in a subsequent generation may have resulted from informant dialect differences rather than generational change.

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[2] They note a missed /-hm-/ cluster. In my 1958 recordings, I treat this as a phonetic devoiced release in /-mm-/ that contrasted with intervocalic /-m-/, primarily in Fred Collin's dialect. I would now choose /-hm-/.

5.4. PREDICTABILITY OF STRESS PATTERNS. The published grammar is the 3rd version I have seen. In this version, the authors state that mora-unit stress patterns in words are unpredictable. I disagree. I found the identical predictability of mora-unit based word stress that Sapir found in Southern Paiute (Sapir 1930-31, p. 38), including the same canonical form that was an exception. In the first version, Zigmond et al. described exactly the same pattern I found (and Sapir found in Southern Paiute) including the same canonical form exception. I am sorry that the authors changed their views about that topic.

5.5. MARY HAAS AND TEXTS. Once, in a seminar, I asked Mary Haas if using English to elicit sentences from informants might run the risk of getting responses biased by English grammatical structure. She replied by saying that such queries were only a starting point, and that one needed to collect and study long unprompted texts to find constructions that might never be elicited just in response to "How do you say.[...]?" questions in English. Only then might one begin to discover the real grammar. (In that context, I have near perfect audiovisual recall of Shirley Silver telling this joke: After two summers of fieldwork with a California Indian language a student returned for a third summer to check previously collected data. A question asked and approved in a previous summer was asked again, "Can you say [...]?." This time the informant replied, "You can, ... but we never do.")

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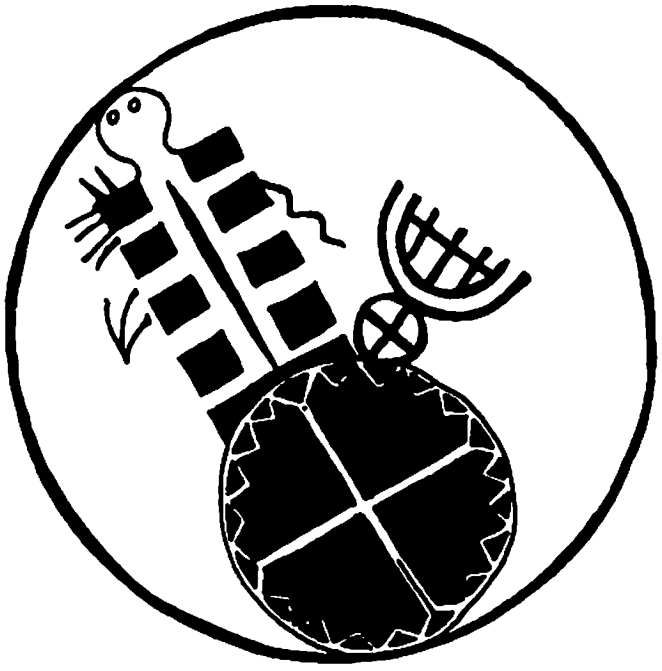
REPORT 12

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES



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